

Coleoptera in Flood Refuse in East Kent Coastal Floods

By JOHN A. PARRY, M.P.S.*

During the extraordinarily high tide of 11th January, 1978, the shingle wall protecting the Cinque Ports Golf Course at Deal was overtopped and in places severely reduced. The land was inundated with sea-water for some days, and small lakes persisted for a month.

The course was visited by myself on 15th January and again in the next week by myself and Mr. Peter Hodge of Lewes, with a view to investigating the beetle content of the flood refuse thrown up on the greens and tees. It was thought that this opportunity to observe total-population samples of coastal sandhills and shingle beds would be very nearly unique, and should not be missed.

The Cinque Ports course is accessible from the north via the toll-gate serving the Sandwich Bay residential estate, or from the south at Sandown Castle, Deal. The refuse examined at these two approaches was broadly similar in content, but there were exceptions. Some species were extremely localized in small areas of refuse, and it was evident that the flooding did not mix up the populations as much as one would expect.

In most samples the dominant single species was *Metabellus truncatellus* L., even outnumbering *Tachyporus hypnorum* F.; it was run a close second by *Kissister minimus* Aubé in some places and by *Dyschirius globosus* Hbst. in others. With sundry small Aleocharinae and *Tachyporus* species these constituted about two-thirds of the beetles present. The remaining third consisted chiefly of Carabidae and Staphylinidae; apart from some numbers of *Helophorus*, *Phytomus*,¹ *Chaetocnema* and some Coccinellidae, other families were poorly represented.

The Carabidae were made up as follows: *Notiophilus substriatus* Wat. (many); *N. aquaticus* L. (few); *N. germinyi* Fauv. (few, south end); *Leistus ferrugineus* L. (two, north end); *Nebria brevicollis* F. (few); *Dyschirius salinus* Schaum (one, south end); *D. globosus* Hbst. (many, mostly south end); †*Panagaeus bipustulatus* F. (3, south end); *Badister bipustulatus* F. (few); *Stenolophus mixtus* Hbst. (few); *Acupalpus dubius* Schil. (few, south end); *A. dorsalis* F. (two south end); *Bradycellus verbasci* Duft. (few); †*B. distinctus* Dej. (two, south end); *B. harpalinus* Serv. (few, south end); *Trichocellus placidus* Gyll. (few); *Harpalus aeneus* F. (few); *H. rubripes* Duft. (few); *H. tardus* Panz. (few); *H. latus* L. (one, north end); *H. anxius* Duft. (few); *H. attenuatus* Steph. (few); †*H. serripes* Quens. (few)²; †*Platyderus ruficollis* Marsh. (2, north end); *Pterostichus versicolor* Stm. (2, south end); *P. vernalis* Panz. (many, south end); *P. strenuus* Panz. (many); *Amara plebeia* Gyll. (few); *A. familiaris* Duft. (abundant); *A. aenea* Deg. (abundant); †*A. spreta* Dej. (few); †*A. curta* Dej. (about 12, towards north end); †*A. lucida* Duft. (about 12, north

* 38 Heather Drive, St. Michaels, Tenterden, Kent.

end)³; *A. ovata* F. (few); *A. anthobia* Villa (about 30, south end); †*A. communis* Panz. (few)⁴; *A. tibialis* Payk. (abundant); *A. apricaria* Payk. (one, south end); *Calathus fuscipes* Goeze (few); *C. erratus* Sahlb. (few); *C. mollis* Marsh. (few); *C. melanocephalus* L. (many); *Agonum albipes* F.; †*Agonum nigrum* Dej. (one, south end); *Bembidion harpaloides* Serv. (few); †*B. nigropiceum* Marsh. (one, north end); *B. biguttatum* F. (few); *B. clarki* Daws. (many); *B. assimile* Gyll. (few); †*B. gilvipes* Stm. (many, south end)⁵; *B. lampros* Hbst. (few); *B. normannum* Dej. (few); *B. properans* Steph. (few); †*Trechus fulvus* Dej. (abundant, north end); *T. obtusus* Er. (several); *T. quadristriatus* Schk. (several); *Asaphidion flavipes* L. (few); †*Masoreus wetterhalli* Gyll. (about 20); *Demetrias monostigma* Sam. (about 15); *D. atricapillus* L. (many); *Dromius linearis* Ol. (many); *D. melanocephalus* Dej. (many); *Microlestes maurus* Stm. (few); †*Metabletus truncatellus* L. (abundant)⁶; *M. foveatus* Geoff. (many).

A dagger sign indicates the more notable or interesting species.

I was most pleased to see *Bradycellus distinctus*, of which I have taken two specimens at Camber also this year, and of which records are few. It has been previously recorded from Deal. *Amara curta* I have not seen before, nor *A. anthobia*⁷, which however is so similar to *A. familiaris* that it might be overlooked amongst that very common species. *Bembidion nigropiceum* and *Trechus fulvus*⁸ both appear to be adapted to a shingle habitat, and I suspect this is why they are so seldom met with. Shingle is a difficult medium to dig, search in, or flood with water, the three most common methods of discovering Carabidae, and I have always found pitfall traps unsuccessful in stones except for larger species such as *Calathus*. *Trechus fulvus* was swarming under the first handful of refuse I lifted, but only one *B. nigropiceum* appeared.

Several interesting Staphylinidae were found. *Gabrius vernalis* Grav., a rarity first noticed by Peter Hodge, later turned up in quantity at Sandown Castle. I found two specimens of *Philonthus lepidus* Grav. (a very local species restricted to sandy places). There were a few of the uncommon *Philonthus nitidicollis* Bsd. & Lac. (= *bimaculatus* Grav.).

Of the weevils, *Apion sedi* Germ. appeared as might have been expected, since this has been for many years a well-known locality for it. The whole length of the shingle wall has now been bulldozed and rebuilt, and it may well be that this species will have a lean time until the foodplant (*Sedum*) is replenished. Other Apions included *A. dissimile* Germ., *A. affine* Kby., *A. laevicolle* Kby., *A. ononis* Kby., *A. ononicola* Bach, and *A. malvae* F. Several species of *Phytonomus* were present in numbers, namely *P. punctatus* F., *P. murinus* F., *P. variabilis* Hbst., *P. trilineatus* Marsh. and *P. nigrirostris* F. However, *P. fasciculatus* Hbst. was absent although I have taken it there in the past and fully expected to see it in the refuse. A number of *Tychius flavicollis* Steph. and *T. tibialis* Boh. were found, and Peter Hodge tells me that amongst the

common *Sitona* species he found *S. waterhousei* Walt.

Aphodius species were almost absent, which was rather odd, since a large area beside the Marina at the Sandwich end is used for grazing. *A. foetidus* Hbst. (= *scybalarius* auct. nec F.) and the coastal *A. plagiatu*s L. were noted, but I was very pleased to find also three specimens of *A. distinctus* Müll.—a species which does not seem to belong there. Perhaps they came from very much further up the east coast and were swept down by the severe currents generated at that time.

Of the Chrysomelidae, *Chrysomela haemoptera* L. and *Timarcha goettingensis* L. (= *coriaria* Laich.) were common; and the Tortoise beetle *Cassida nobilis* L. (about a dozen specimens), one *C. prasina* Ill. (= *sanguinolenta* auct. Brit. nec Müll.), *C. rubiginosa* Müll., a few *Chrysomela staphylea* L. and an abundance of *Psylliodes chrysocephala* L. (including the form *anglica* F. with yellow elytra) made up most of the Phytophaga present.

In the Clavicornia, numbers of the very smelly *Silpha tristis* Ill. appeared at Deal, and also at this end were several *Hister purpurascens* Hbst. and *H. duodecimstriatus* Schk. together with many hundreds of *Kissister minimus* Aubé. There were a few *Saprinus aeneus* F. and a single *S. immundus* Gyll., but surprisingly *S. metallicus* Hbst. was absent. There were quite a few *Euconnus fimetarius* Chaud. and about equal numbers of *Agathidium laevigatum* Er. and *A. marginatum* Stm. *Hyperaspis pseudopustulata* Muls. (= *repensis* auct. nec Hbst.) was the best Coccinellid.

Except for the Carabidae this is not, of course, a complete list, and I have still to identify many *Atomaria* etc. It contains one or two surprises but also several unhappy absences, such as *Lixus vilis* Rossi (= *bicolor* Ol.) which should be there if anywhere, and *Phytonomus fasciculatus* Hbst. However, great upheavals are often followed by population explosions of unexpected beetles, and it remains to be seen what will turn up there in a year or two.

Further notes on certain species

Bradycellus distinctus Dej. A. A. Allen (1959, *Ent. mon. Mag.*, 95:123) records the presence of this species on the Deal sandhills. Mr. Eric Philp tells me that he took one in the sand-pit at Aylesford, Kent, 13.vi.1963 (specimen confirmed by Peter Hammond) and this is here recorded.

Philonthus lepidus Grav. This is first recorded in the Victoria County History list as far back as 1907 as occurring at Sandwich⁹, and Mr. Philp and Mr. Hodge have taken it here since, although I understand it to prefer the estuary of the Stour further to the north.

Apion sedi Germ. There is only one other recorded locality in Kent for this species that I can trace, and that is at Dungeness, where Dr. M. G. Morris took it on an arranged expedition (1959, *Proc. S. Lond. ent. nat. Hist. Soc.*:85). It has persisted at Deal and Sandwich for very many years. I found it there in June 1977 after much searching, on desiccated and almost unrecognizable stonecrop (*Sedum acre*) by sifting soil

from around the roots in a fine sieve. Whether it will survive there after this will remain to be seen.

[¹The older name *Hypera* has now come back into use. ²The absence of *H. servus* Duft. and *cordatus* Duft., typical Deal species, is curious. ³This mainly coastal species seems to be quite scarce nowadays. ⁴Though usually regarded as common I am convinced that it is not so at least in the S.E., the closely-allied but more frequent *A. convexior* Steph. often doing duty for it. ⁵Also generally scarce at the present time though apparently rather common formerly. ⁶By no means a common species as a rule, but it seems to be presently undergoing a large increase in some areas. ⁷Widespread and locally plentiful at times; much commoner than e.g. *lucida* or *communis*. ⁸I have taken both these species on shores of sand or fine shingle where the special feature was the proximity of a small stream or trickle of fresh water. ⁹My copy of the V.C.H. list for Kent is dated 1908 and *P. lepidus* is there recorded only from Deal, whence however there are much earlier records by Walker and Power, as given in Fowler (1888). I have taken it there singly twice. — A. A. A.]

TRIBAL CLASSIFICATION OF ASIRACINE DELPHACIDAE (HOMOPTERA: FULGOROIDEA). — Delphacidae that possess an awl-shaped post-tibial spur from the subfamily Asiracinae. This has never been subdivided, although its genera fall into two distinct groups. These are here defined and proposed as new tribes.

Asiracini, trib. nov. Genae with an oblique carina from below base of antenna to frontoclypeal suture near its junction with lateral margin of frons. Rostrum not attaining post-trochanters. Macropterous form with subapical cell reaching to apical quarter or apical fifth of tegmen; apex of clavus narrowly acute, and only rarely followed by a transverse flexure line.

The nominal genera of this tribe include: *Asiraca*, *Elaphodelphax*, *Manchhookonia*, *Copicerus*, *Pentagramma*, *Bergias*, *Idiosemus* and *Idiosystatus*.

Ugyopini, trib. nov. Genae without an oblique carina between antennal socket and frontoclypeal suture near its junction with lateral margin of frons. Rostrum attaining or surpassing post-trochanters. Macropterous form with subapical cell reaching to about apical third of tegmen; apex of clavus subtruncate or thickened, and usually followed by a transverse flexure line.

The nominal genera of this tribe include: *Ugyops*, *Epibidis*, *Canyra*, *Eucanyra*, *Ostama*, *Ugyopana*, *Consualia*, *Melanesia*, *Punana*, *Platysystatus*, *Perimececera*, *Livatiella*, *Melanugyops*, *Notuchus*, *Paranda* and *Tetrasteira*. — R. G. FENNAH, c/o Commonwealth Institute of Entomology, British Museum, Natural History, Cromwell Road, London SW7 5BD.